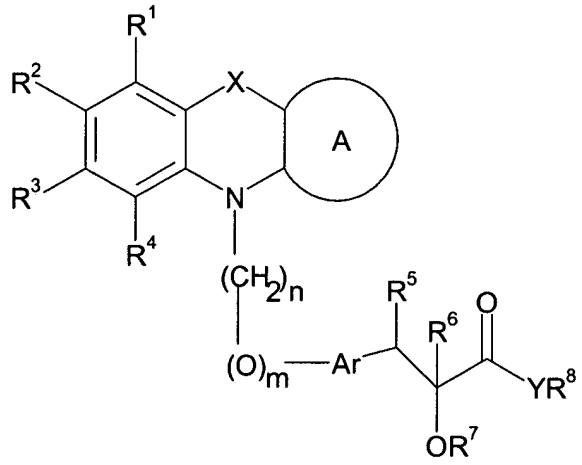
CLAIM LISTING

1. (Previously presented) A compound of formula (Ia)



(Ia)

wherein R^1, R^2, R^3, and R^4 independently of each other represent hydrogen, halogen, perhalomethyl, hydroxy, nitro, cyano, formyl, or C_{1-12}-alkyl, C_{4-12}-alkenynyl, C_{2-12}-alkenyl, C_{2-12}-alkynyl, C_{1-12}-alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyC_{1-12}-alkyl, amino, acylamino, C_{1-12}-alkylamino, arylamino, aralkylamino, aminoC_{1-12}-alkyl, C_{1-12}-alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, C_{1-12}-alkoxyC_{1-12}-alkyl, aryloxyC_{1-12}-alkyl, aralkoxyC_{1-12}-alkyl, C_{1-12}-alkylthio, thioC_{1-12}-alkyl, C_{1-12}-alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, -COR^{11}, or -SO_2R^{12}, wherein R^{11} and R^{12} independently of each other are selected from hydroxy, halogen, perhalomethyl, C_{1-6}-alkoxy or amino optionally substituted with one or more C_{1-6}-alkyl, perhalomethyl or aryl; optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano;
or R^1 and R^2, R^2 and R^3 and/or R^3 and R^4 may form a cyclic ring containing from 5 to 7 carbon atoms optionally substituted with one or more C_{1-6}-alkyl;

ring A fused to the ring containing X and N represents a 5-6 membered cyclic ring, optionally substituted with one or more hydrogen, halogen, perhalomethyl, hydroxy or C_{1-7}-alkyl, C_{2-7}-alkenyl, C_{2-7}-alkynyl, C_{1-7}-alkoxy or aryl;

X is -S-(CHR^9)-, -(NR^9)-S(O_2)-, -CH_2-(SO)-, -(SO)-, -(SO_2)-, -CH_2-(SO_2)-, wherein R^9 is hydrogen, halogen, hydroxy, nitro, cyano, formyl, C_{1-12}-alkyl, C_{1-12}-alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyalkyl, amino, acylamino, C_{1-12}-alkylamino, arylamino, aralkylamino, aminoC_{1-12}-alkyl, C_{1-12}-alkoxycarbonyl, aryloxycarbonyl, aralkoxycarbonyl, C_{1-12}-alkoxyC_{1-12}-alkyl, aryloxyC_{1-12}-alkyl, aralkoxyC_{1-12}-alkyl, C_{1-12}-alkylthio, thioC_{1-12}-alkyl, C_{1-12}-alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, -COR^{13}, or -SO_2R^{14}, wherein R^{13} and R^{14} independently of each other are selected from hydroxy, halogen, C_{1-6}-alkoxy, amino optionally substituted with one or more C_{1-6}-alkyl, perhalomethyl or aryl;

Ar represents arylene or heteroarylene, optionally substituted with one or more C_{1-6}-alkyl or aryl;
R^5 represents hydrogen, hydroxy, halogen, C_{1-12}-alkoxy, C_{1-12}-alkyl, C_{4-12}-alkenynyl, C_{2-12}-alkenyl, C_{2-12}-alkynyl or aralkyl; optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano; or R^5 forms a bond together with R^6,
R^6 represents hydrogen, hydroxy, halogen, C_{1-12}-alkoxy, C_{1-12}-alkyl, C_{4-12}-alkenynyl, C_{2-12}-alkenyl, C_{2-12}-alkynyl, acyl or aralkyl; optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano; or R^6 forms a bond together with R^5,
R^7 represents hydrogen, C_{1-12}-alkyl, C_{4-12}-alkenynyl, C_{2-12}-alkenyl, C_{2-12}-alkynyl, aryl, aralkyl, C_{1-12}-alkoxyC_{1-12}-alkyl, C_{1-12}-alkoxycarbonyl, aryloxycarbonyl, C_{1-12}-alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl or heteroaralkyl groups; optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano;
R^8 represents hydrogen, C_{1-12}-alkyl, C_{4-12}-alkenynyl, C_{2-12}-alkenyl, C_{2-12}-alkynyl, aryl, aralkyl, heterocyclyl, heteroaryl or heteroaralkyl groups; optionally substituted with one or more halogen, perhalomethyl, hydroxy, nitro or cyano;
Y represents oxygen, sulphur or NR^{10}, where R^{10} represents hydrogen, C_{1-12}-alkyl, aryl, hydroxyC_{1-12}-alkyl or aralkyl groups or when Y is NR^{10}, R^8 and R^{10} may form a 5 or 6 membered nitrogen containing ring, optionally substituted with one or more C_{1-6}-alkyl;
n is an integer ranging from 1 to 4 and m is an integer ranging from 0 to 1;
or a pharmaceutically acceptable salt thereof.

2. (Original) A compound according to claim 1 wherein R^1, R^2, R^3, and R^4 independently of each other represent hydrogen, halogen, perhalomethyl, hydroxy, cyano, or C_{1-7}-alkyl, C_{4-7}-alkenynyl, C_{2-7}-alkenyl, C_{2-7}-alkynyl, C_{1-7}-alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyC_{1-7}-alkyl, amino, acylamino, C_{1-7}-alkylamino, arylamino, aralkylamino, aminoC_{1-7}-alkyl, C_{1-7}-alkoxyC_{1-7}-alkyl, aryloxyC_{1-7}-alkyl, aralkoxyC_{1-7}-alkyl, C_{1-7}-alkylthio, thioC_{1-7}-alkyl, C_{1-7}-alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, -COR^{11}, or -SO_2R^{12}, wherein R^{11} and R^{12} independently of each other are selected from hydroxy, perhalomethyl or amino optionally substituted with one or more C_{1-6}-alkyl, perhalomethyl or aryl; optionally substituted with one or more halogen, perhalomethyl, hydroxy or cyano; or R^1 and R^2, R^2 and R^3 and/or R^3 and R^4 may form a cyclic ring containing from 5 to 7 carbon atoms optionally substituted with one or more C_{1-6}-alkyl.

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Previously presented) A compound according to claim 1 wherein ring A fused to the ring containing X and N represents a 5-6 membered cyclic ring, optionally substituted with one or more hydrogen, halogen, perhalomethyl, hydroxy, cyano, or C_{1-7}-alkyl, C_{4-7}-alkenynyl, C_{2-7}-alkenyl, C_{2-7}-alkynyl, C_{1-7}-alkoxy, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heteroaryl, heteroaralkyl, heteroaryloxy, heteroaralkoxy, acyl, acyloxy, hydroxyC_{1-7}-alkyl, amino, acylamino, C_{1-7}-alkylamino, arylamino, aralkylamino, aminoC_{1-7}-alkyl, C_{1-7}-alkoxyC_{1-7}-alkyl, aryloxyC_{1-7}-alkyl, aralkoxyC_{1-7}-alkyl, C_{1-7}-alkylthio, thioC_{1-7}-alkyl, C_{1-7}-alkoxycarbonylamino, aryloxycarbonylamino, aralkoxycarbonylamino, -COR^{11}, or -SO_2R^{12}, wherein R^{11} and R^{12} independently of each other are selected from hydroxy, perhalomethyl or amino optionally substituted with one or more C_{1-6}-alkyl, perhalomethyl or aryl; optionally substituted with one or more halogen, perhalomethyl, hydroxy or cyano.

8. (Cancelled)

9. (Cancelled

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Previously presented) A compound according to claim 1 wherein Ar represents arylene or heteroarylene;

R^5 represents hydrogen, hydroxy, halogen; or R^5 forms a bond together with R^6,

R^6 represents hydrogen, hydroxy, halogen; or R^6 forms a bond together with R^5,

R^7 represents hydrogen, C_{1-7}-alkyl, C_{2-7}-alkenyl, C_{2-7}-alkynyl, aryl, aralkyl, C_{1-7}-alkoxyC_{1-7}-alkyl, C_{1-7}-alkylaminocarbonyl, arylaminocarbonyl, acyl, heterocyclyl, heteroaryl or heteroaralkyl groups;

R^8 represents hydrogen, C_{1-7}-alkyl, C_{2-7}-alkenyl, C_{2-7}-alkynyl;

Y represents oxygen or sulphur;

n is an integer ranging from 2 to 3 and m is 1.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

26. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Previously presented) The compound according to claim 1 which is
2-Ethoxy-3-{4-[2-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-ethoxy]-phenyl}-propionic acid,
2-Methoxy-3-{4-[2-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-ethoxy]-phenyl}-propionic acid,
2-Propoxy-3-{4-[2-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-ethoxy]-phenyl}-propionic acid,
2-Benzyloxy-3-{4-[2-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-ethoxy]-phenyl}-propionic acid,
2-Ethoxy-3-{4-[1-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-methoxy]-phenyl}-propionic acid,

2-Ethoxy-3-{4-[3-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-propoxy]-phenyl}-propionic acid,

2-Propoxy-3-{4-[3-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-propoxy]-phenyl}-propionic acid,

2-Methoxy-3-{4-[3-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-propoxy]-phenyl}-propionic acid,

2-Ethoxy-3-{4-[3-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-propyl]-phenyl}-propionic acid,

2-Propoxy-3-{4-[3-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-propyl]-phenyl}-propionic acid,

2-Methoxy-3-{4-[3-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-propyl]-phenyl}-propionic acid,

2-Ethoxy-3-{4-[2-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-ethoxy]-phenyl}-propionic acid,

2-Methoxy-3-{4-[2-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-ethoxy]-phenyl}-propionic acid,

2-Propoxy-3-{4-[2-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-ethoxy]-phenyl}-propionic acid,

2-Benzyloxy-3-{4-[2-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-ethoxy]-phenyl}-propionic acid,

2-Ethoxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propoxy]-phenyl}-propionic acid,

2-Propoxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propoxy]-phenyl}-propionic acid,

2-Methoxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propoxy]-phenyl}-propionic acid,

2-Benzyloxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propoxy]-phenyl}-propionic acid,

2-Ethoxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propyl]-phenyl}-propionic acid,

2-Propoxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propyl]-phenyl}-propionic acid,

2-Methoxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propyl]-phenyl}-propionic acid,

2-Benzyloxy-3-{4-[3-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-propyl]-phenyl}-propionic acid,

2-Ethoxy-3-{4-[1-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-methoxy]-phenyl}-propionic acid,

3-(4-(2-(2-Chloro-5-oxo-phenothiazin-10-yl)-ethoxy)-phenyl)-2-ethoxy-propionic acid,

3-(4-(2-(2-Chloro-5-oxo-phenothiazin-10-yl)-ethoxy)-phenyl)-2-propoxy-propionic acid,

3-(4-(2-(2-Chloro-5-oxo-phenothiazin-10-yl)-ethoxy)-phenyl)-2-methoxy-propionic acid,

3-(4-(2-(2-Chloro-5-oxo-phenothiazin-10-yl)-ethoxy)-phenyl)-2-benzyloxy-propionic acid,

3-(4-(1-(2-Chloro-5-oxo-phenothiazin-10-yl)-methoxy)-phenyl)-2-ethoxy-propionic acid,

3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propoxy)-phenyl)-2-ethoxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propoxy)-phenyl)-2-propoxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propoxy)-phenyl)-2-methoxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propoxy)-phenyl)-2-benzyloxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propyl)-phenyl)-2-ethoxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propyl)-phenyl)-2-propoxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propyl)-phenyl)-2-methoxy-propionic acid,
3-(4-(3-(2-Chloro-5-oxo-phenothiazin-10-yl)-propyl)-phenyl)-2-benzyloxy-propionic acid,
or a pharmaceutically acceptable salt thereof.

46. (Previously presented) The compound according to claim 1 which is
2-Ethoxy-3-{4-[2-(11-methyl-10,10-dioxo-10,11-dihydro-10λ^6-thia-5,11-diaza-dibenzo[a,*d*]cyclohepten-5-yl)-ethoxy]-phenyl}-propionic acid,
2-Ethoxy-3-{4-[2-(5-oxo-5*H*-5λ^4-phenothiazin-10-yl)-ethoxy]-phenyl}-propionic acid; or a pharmaceutically acceptable salt thereof.

47. (Previously presented) A pharmaceutical composition comprising, as an active ingredient, a compound according to claim 1 or a pharmaceutically acceptable salt thereof together with a pharmaceutically acceptable carrier or diluent.

48. (Cancelled)
49. (Cancelled)
50. (Cancelled)
51. (Cancelled)
52. (Cancelled)
53. (Cancelled)

54. (Currently amended) A method for the treatment of conditions mediated by the Peroxisome Proliferator-Activated Receptors (PPAR), **wherein the condition is selected from the following: type 2 diabetes, impaired glucose tolerance, hypertension, obesity, insulin resistance, hyperglycemia, atherosclerosis, hyperlipidemia, coronary artery disease, glomerulonephritis, glomerulosclerosis, nephritic syndrome, hypertensive nephrosclerosis,**

dementia, diabetic complications, psoriasis, polycystic ovarian syndrome and osteoporosis, the method comprising administering to a subject in need thereof an effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof.

55. (Previously presented) A method for the treatment of diabetes or obesity, the method comprising administering to a subject in need thereof an effective amount of a compound according to claim 1 or a pharmaceutically acceptable salt thereof.

56. (Cancelled)

57. (Cancelled)

58. (Cancelled)

59. (Cancelled)

60. (Cancelled)

RESPONSE

The Examiner states in the Office Action Summary that claims numbered 1, 2, 7, 17, 45-47, 54 and 55 are pending in the application; claims numbered 1, 2, 7, 17, 45-47, and 55 are allowed; and claim number 54 is rejected.

(1) The Examiner has rejected claim number 54 under 35 U.S.C.§112, first paragraph, for failing to comply with the written description requirement. Specifically: the examiner states the specification, while being enabling for the treatment of diabetes or obesity, does not reasonably provide enablement for the treatment of other conditions mediated by the Peroxisome Proliferator-Activated Receptors (PPARs).

Applicant respectfully requests that the Examiner consider the two *review* articles enclosed with this response as being relevant to treatment of conditions mediated by the PPARs: "The PPARs: From Orphan Receptors to Drug Discovery", Willson et al., *Journal of Medicinal Chemistry*, Vol. 43, Number 4, pages 527-550 (February 24, 2000); and "Physiological and Therapeutic Roles of Peroxisome Proliferator-Activated Receptors", Berger et al., *Diabetes Technology & Therapeutics*, Volume 4, Number 2, pages 163-174 (2002). These review articles were published in 2000 and 2002, but draw the vast majority of the articles cited from 1999 and prior.

To place the claim in better condition for appeal, Applicant has amended claim number 54 to recite diseases/disorders found on page 1, lines 17-25 of the specification as originally filed.

Applicant respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C.§112, first paragraph.

In view of the above, Applicant respectfully submits all claims are in condition for allowance. *Applicant respectfully requests notification via an Advisory Action or telephone call if the Examiner deems the case is not in condition for allowance.*

The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

Date: August 5, 2004

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